**SUNDAY JANUARY 13th 2019**

6pm - 7pm Dinner

7pm - 8pm Reception

**MONDAY JANUARY 14th 2019**

7:30 AM – 9:00 AM BREAKFAST

9:00 AM – 10:00 AM  KEYNOTE

**“*DNA Data Storage and Near-Molecule Processing for the Yottabyte Era”*** by Karin Strauss (Microsoft) and Luis Ceze (University of Washington)

10:00 AM – 10:30 BREAK

10:30 AM – 12:00 PM SESSION 1: **Hardware-Conscious Query Processing**

Introduction

1. Raja Appuswamy (Eurecom); Kevin Lebrigand (IPMC); Pascal Barbry (IPMC); Marc Antonini (Universite Nice Sophia Antipolis); Olivier Madderson (Imperial College); Paul Freemont (Imperial College); James McDonald (Imperial College); Thomas Heinis (Imperial College): ***“OligoArchive: Using DNA in the DBMS storage hierarchy”***
2. Periklis Chrysogelos (EPFL); Panagiotis Sioulas (École Polytechnique Fédérale de Lausanne); Anastasia Ailamaki (EPFL): ***“Hardware-conscious Query Processing in GPU-accelerated Analytical Engines”***
3. Alberto Lerner (eXascale Infolab); Rana Hussein (University of Fribourg); Philippe Cudre-Mauroux (University of Fribourg, Switzerland): ***“The Case for Network Accelerated Query Processing”***
4. Gustavo Alonso (ETHZ); Carsten Binnig (TU Darmstadt); Ippokratis Pandis (Amazon Web Services); Kenneth Salem (University of Waterloo); Jan Skrzypczak (Zuse Institue, Berlin); Ryan Stutsman (University of Utah); Lasse Thostrup (TU Darmstadt); Tianzheng Wang (Simon Fraser University); Zeke Wang (ETH Zurich); Tobias Ziegler (TU Darmstadt): ***“DPI: The Data Processing Interface for Modern Networks”***

12:00 PM – 1:00 PM LUNCH BREAK

1:00 PM – 2:30 PM SESSIONS 2A and 2B

Session 2A **Cloud**

1. Joseph M Hellerstein (UC Berkeley); Jose Faleiro (UC Berkeley); Joseph Gonzalez (UC Berkeley); Johann Schleier-Smith (UC Berkeley); Vikram Sreekanti (UC Berkeley); Alexey Tumanov (UC Berkeley); Chenggang Wu (UC Berkeley): ***“Serverless Computing: One Step Forward, Two Steps Back”***
2. Johannes Gehrke (Microsoft); Lindsay Allen (Microsoft); Panagiotis Antonopoulos (Microsoft); Arvind Arasu (Microsoft); Joachim Hammer (Microsoft); James Hunter (Microsoft Research); Raghav Kaushik (Microsoft); Donald Kossmann (Microsoft Research); Ravi Ramamurthy (MICROSOFT); Srinath Setty (Microsoft); Jakub Szymaszek (Microsoft); Alexander van Renen (Technical University of Munich); Jonathan Lee (Microsoft Research); Ramarathnam Venkatesan (Microsoft): ***“Veritas: Shared Verifiable Databases and Tables in the Cloud”***

Session 2B **Querying Sensitive Data**

1. Ios Kotsogiannis (Duke University); Yuchao Tao (Duke University); Ashwin Machanavajjhala (Duke); Gerome Miklau (University of Massachusetts Amherst); Michael Hay (Colgate University): “***Architecting a Differentially Private SQL Engine”***
2. Rajesh Bordawekar (IBM T. J. Watson Research Center); Oded Shmueli (Computer Science Department, Technion): “***Exploiting Latent Information in Relational Databases via Word Embedding and Application to Degrees of Disclosure”***

2:30 PM – 3:00 PM BREAK

3:00 PM – 5:00 PM SESSION 3 **New Approaches to Building Systems and Applications**

            Introduction

1. Holger Pirk (Imperial College London); Jana Giceva (Imperial College London); Peter Pietzuch (Imperial College London): ***“Thriving in the No Man's Land between Compilers and Databases”***
2. Alexander J Ratner (Stanford University); Braden Hancock (Stanford University); Christopher Re (Stanford University): ***“The Role of Massively Multi-Task and Weak Supervision in Software 2.0”***
3. Sandeep Tata ("Google, USA"); Vlad Panait (Google); Suming Chen (Google); Mike Colagrosso (Google): ***“ItemSuggest: A Data Management Platform for Machine Learned Ranking Services”***
4. Stratos Idreos Stratos Idreos (Harvard University); Niv Dayan (Harvard University); Wilson Qin (Harvard University); Mali Akmanalp (Harvard University); Sophie Hilgard (Harvard University); Andrew Ross (Harvard University); James Lennon (Harvard University); Varun Jain (Harvard University); Harshita Gupta (Harvard University); David Li (Harvard University); Zichen Zhu (Harvard University): “***Design Continuums and the Path Toward Self-Designing Key-Value Stores that Know and Learn”***
5. Tim Kraska (MIT); Mohammad Alizadeh (MIT CSAIL); Alex Beutel (Google); Ed Chi (Google); Ani Kristo (Brown University); Guillaume Leclerc (Massachussets Institute of Technology); Samuel Madden (MIT); Hongzi Mao (MIT CSAIL); Vikram Nathan (MIT): ***“SageDB: A Learned Database System”***

6:00 PM – 7:00 PM   DINNER

7:00 PM -  8:00 PM  GONG SHOW 1

(Session chair: Andy Pavlo – CMU)

**TUESDAY JANUARY 15th 2019**

7:30 AM – 9:00 AM BREAKFAST

9:00 AM – 10:00 AM  KEYNOTE 2

***“Using Bots, Machine Learning & Pipelines to create a modern data management environment”***, by Mark Ramsay (GSK)

10:00 AM – 10:30 BREAK

10:30 AM – 11:45 AM SESSION 4 **Query Optimization**

            Introduction

1. Michael J Freitag (TUM); Thomas Neumann (TUM): ***“Every Row Counts: Combining Sketches and Sampling for Accurate Group-By Result Estimates”***
2. Andreas Kipf (Technical University of Munich); Thomas Kipf (University of Amsterdam); Bernhard Radke (Technische Universität München); Viktor Leis (TUM); Peter Boncz (Centrum Wiskunde & Informatica); Alfons Kemper (TUM): ***“Learned Cardinalities: Estimating Correlated Joins with Deep Learning”***
3. Ryan C Marcus (Brandeis University); Olga Papaemmanouil (Brandeis University): ***“Towards a Hands-Free Query Optimizer through Deep Learning”***

12:00 PM – 3:00 LUNCH & BEACH

3:00 PM – 5:00 PM SESSION 5 **Multimedia and Multimodal**

Introduction

1. Sanjay Krishnan (U Chicago); Adam Dziedzic (The University of Chicago); Aaron J Elmore (University of Chicago): ***“DeepLens: Towards a Visual Data Management System”***
2. Daniel Kang (Stanford University); Peter D Bailis (Stanford University); Matei Zaharia (Stanford and Databricks): ***“Challenges and Opportunities in DNN-Based Video Analytics: A Demonstration of the BlazeIt Video Query Engine”***
3. Wenbo Tao (MIT); Xiaoyu Liu (Purdue University); Cagatay Demiralp (MIT); Remco Chang (Tufts University); Michael Stonebraker (MIT): ***“Kyrix: Interactive Visual Data Exploration at Scale”***
4. Codi J Burley (The Ohio State University); Arnab Nandi (The Ohio State University): ***“ARQuery: Hallucinating Analytics over Real-World Data using Augmented Reality”***
5. Immanuel Trummer (Cornell University): ***“Data Vocalization with CiceroDB”***

6:00 PM – 7:00 PM DINNER

7:00 PM – 8:00 PM GONG SHOW – 2

(Session chair: Andy Pavlo –  CMU)

**WEDNESDAY JANUARY 16th 2019**

7:30 AM – 9:00 AM BREAKFAST

9:00 AM – 10:00 AM SESSION 6 **Data Integration and Evolution**

            Introduction

1. Tobias Bleifuß (Hasso Plattner Institute); Leon Bornemann (Hasso Plattner Institute); Dmitri V. Kalashnikov (AT&T Labs Research); Felix Naumann (Hasso Plattner Institute); Divesh Srivastava (AT&T Labs Research): ***“DBChEx: Interactive Exploration of Data and Schema Change”***
2. Zack Ives (University of Pennsylvania); Yi Zhang (University of Pennsylvania); Soonbo Han (University of Pennsylvania); Nan Zheng (University of Pennsylvania): ***“Dataset Relationship Management”***
3. Zhongjun Jin (University of Michigan); Christopher Baik (University of Michigan); Michael Cafarella (University of Michigan); H. V. Jagadish (University of Michigan); Yuze Lou (University of Michigan): ***“Demonstration of a Multiresolution Schema Mapping System”***

10:00 AM – 10:30 BREAK

10:30 AM – 12:15 AM SESSION 7 **System Corectness and Performance**

Introduction

1. Shrainik Jain (University of Washington); Jiaqi Yan (Snowflake Computing); Thiery Cruanes (Snowflake Computing); Bill Howe (University of Washington): ***“Database-Agnostic Workload Management”***
2. Zuyu Zhang (University of Wisconsin-Madison); Harshad Deshmukh (University of Wisconsin-Madison); Jignesh Patel (UW - Madison): ***“Data Partitioning for In-Memory Systems: Myths, Challenges, and Opportunities”***
3. Anastasios Arvanitis (Unravel Data Systems); Shivnath Babu (Duke University); Eric Chu (Unravel Data Systems); Adrian Popescu (Unravel Data Systems); Alkis Simitsis (Unravel Data Systems); Kevin Wilkinson (Unravel Data Systems): ***“Automated Performance Management for the Big Data Stack”***
4. Lennart Oldenburg (University of California, Santa Cruz); Xiangfeng Zhu (University of California, Santa Cruz); Kamala Ramasubramanian (University of California, Santa Cruz); Peter Alvaro (UC Santa Cruz): ***“Fixed It For You: Protocol Repair Using Lineage Graphs”***
5. Martin Kersten (CWI); Stefan Manegold (CWI Amsterdam); Ying Zhang (MonetDB Solutions); Panos Kuoutsourakis (MonetDB Solutions): ***“SQALPEL: A database performance platform”***